

ABSTRACT

An incombustible withdrawing system (302a) withdraws an incombustible from a fluidized-bed furnace (305) having a fluidized bed (312) formed therein by a fluidized medium (310). The incombustible withdrawing system (302a) has a mixture delivery path (316) to deliver a mixture (310b) of the fluidized medium and the incombustible from a bottom (311) of the fluidized-bed furnace (305). The incombustible withdrawing system (302a) also has a fluidized-bed separating chamber (390) disposed downstream of the mixture delivery path (316) to fluidize the mixture (310b) by a fluidizing gas (331) and to separate the mixture into a first separated mixture (310g) and a second separated mixture (310f). The incombustible withdrawing system (302a) includes a return passage (391, 394) to return the first separated mixture (310g) to the fluidized-bed furnace (305), and an incombustible discharge passage (392) to discharge the second separated mixture (310f) to an exterior of the fluidized-bed furnace (305).